

Department of Energy

Oak Ridge Operations P.O. Box 2001 Oak Ridge, Tennessee 37831— 8218

December 16, 1998

Dear Citizen:

SPALLATION NEUTRON SOURCE PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT, DOE/EIS-0247

Enclosed for your review is the Department of Energy's Draft Environmental Impact Statement for the Spallation Neutron Source (DOE/EIS-0247). As established by the Energy Policy Act of 1992, the Department is responsible for planning, construction, and operation of user facilities to provide special scientific and research capabilities to serve the needs of our Nation's universities, industry, and private and Federal laboratories. Accordingly, the Department has proposed the Spallation Neutron Source (SNS) as a next-generation accelerator-based neutron scattering facility that would support the future scientific needs of a diverse community of researchers.

As required by the National Environmental Policy Act, the enclosed Draft Environmental Impact Statement (EIS) evaluates the potential environmental impacts associated with constructing and operating the proposed SNS at four alternative sites. The Department's preferred site for the SNS is Oak Ridge National Laboratory (ORNL) in Tennessee. In addition to ORNL, the Draft EIS analyzes alternative sites at: Argonne National Laboratory (ANL) in Illinois, Brookhaven National Laboratory (BNL) in New York, and Los Alamos National Laboratory (LANL) in New Mexico. A Record of Decision is planned for May 1999.

The Department encourages interested parties to provide comments on the Draft EIS. The comment period is from December 24, 1998, to February 8, 1999. The Department will consider all comments received or postmarked by February 8, 1999, in preparing the Final EIS; later comments will be considered to the extent practicable.

To facilitate public review, the Department of Energy will hold public meetings to receive comments on the Draft EIS during January 1999 as follows:

Date/Time

Location

January 19, 1999 2:00 PM and 7:00 PM DOE Los Alamos Area Office Main Conference Room (Rm. 100) 528 35th Street Los Alamos, New Mexico 87544

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December 16, 1998

Date/Time	Location
January 21, 1999 2:00 PM and 7:00 PM	Brookhaven National Laboratory Berkner Hall (Building 488) Brookhaven Avenue Upton, New York 11973
January 25, 1999 2:00 PM and 7:00 PM	Argonne National Laboratory Building 401 - Advanced Photon Source, Rm. A1100 9700 South Cass Avenue Argonne, Illinois 60439
January 29, 1999 2:00 PM and 7:00 PM	American Museum of Science and Energy 300 South Tulane Avenue

Written comments may be submitted to David Wilfert, U.S. Department of Energy, Oak Ridge Operations Office, 200 Administration Road, 146/SNS, Oak Ridge, Tennessee 37831; or by electronic mail to NSNSEIS@ornl.gov; or by facsimile at (423) 576-4542. Oral comments may be recorded by calling (800) 927-9964 or presented at the public meetings.

Oak Ridge, Tennessee 37830

Thank you for your interest in the Department's scientific research activities.

Sincerely,

A. Lee Watkins, Project Manager Spallation Neutron Source

Enclosure:

Citizen



Department of Energy Brookhaven Group Building 464 P.O. Box 5000 Upton, New York 11973

MAY 2 6 1998

Mr. Clarence Hickey NEPA Compliance Officer, ER-8 U.S. Department of Energy 19901 Germantown Road Germantown, MD 20874-1290

Dear Mr. Hickey:

SUBJECT: COMMENTS ON THE SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT (EIS) FOR THE HIGH FLUX BEAM REACTOR (HFBR) TRANSITION PROJECT

This letter provides you with an update on the status of the U.S. Department of Energy's (DOE) Environmental Impact Statement for the High Flux Beam Reactor Transition Project at Brookhaven National Laboratory.

The formal comment period for the scoping of the EIS began on November 24, 1997, and ended on January 23, 1998. During the formal comment period, three public meetings were held: December 10, 1997 in Mastic Beach, January 10, 1998 in Middle Island, and January 15, 1998 in Wading River. A total of 592 comments were received from stakeholders verbally at the public meetings, and from letters, faxes, e-mail, phone, and comment cards. All comments are being evaluated and the results will be provided in the HFBR Transition Project EIS Public Scoping Comments and Resolution Document which will be made available to the public. You will be informed by mail when the document is available.

The HFBR Transition Project EIS Public Scoping Comments and Resolution Document provides an overview of the purpose and guidelines for the development of the EIS, the scoping process and the results. All 592 comments will be included in the document as well as an explanation of how comments will be addressed in the EIS.

Many commentors stated they felt the Department should take more time to develop the HFBR Transition Project EIS to assure the quality of the document. The Department agrees, and the HFBR Transition Project EIS development schedule has been revised as follows:

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Mr. Hickey:

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MAY 2 6 1998

Milestone	Previous Date	Revised Date
Draft EIS Public Review/Comment Period	July - September 1998	November 1998 - January 1999
Final EIS Public Availability	November 1998	April 1999
Record of Decision	December 1998	May 1999

As these milestones approach, we will inform you by mail and public notice of the exact dates, meeting places, EIS document availability, and other related information.

Thank you for your participation in the development process for the Environmental Impact Statement for the future of the High Flux Beam Reactor.

Sincerely,

m. Holland

Michael D. Holland, Project Manager HFBR Transition Project



Department of Energy Brookhaven Group Building 464 P.O. Box 5000 Upton, New York 11973

January 12, 1999

Dear Stakeholder:

SUBJECT: HIGH FLUX BEAM REACTOR TRANSITION PROJECT ENVIRONMENTAL IMPACT STATEMENT

Because of your expressed interest in the Brookhaven National Laboratory High Flux Beam Reactor Transition Project, I am providing you with the U.S. Department of Energy's updated schedule for the research reactor's Environmental Impact Statement process.

During the Environmental Impact Statement scoping process a year ago, the community requested that the Department of Energy expand analysis of the research reactor's potential environmental impacts. In accommodating that request, we estimated that the draft Environmental Impact Statement would be available for public comment from November 1998 through January 1999. This would be followed by a final Environmental Impact Statement in May 1999 and a record of decision in June 1999.

To ensure that a comprehensive review is conducted, we have taken additional time for analysis and evaluation. We now expect the draft Environmental Impact Statement to be available for public review and comment from late February through early April 1999. You will be notified by mail of the comment period's exact dates. Those dates also will be published in the Federal Register and various Long Island newspapers. The final Environmental Impact Statement is expected to be published in July 1999 and the record of decision issued in August, 1999.

Thank you for your continued interest in the High Flux Beam Reactor Transition Project. If you would like more information about the research reactor, the Transition Project, or the Environmental Impact Statement process, please contact me at 516-344-3552 or mholland@bnl.gov.

Sincerely,

Michael D. Holland, Director Project Management Division

M. Holland



Department of Energy Brookhaven Group Building 464 P.O. Box 5000 Upton, New York 11973

February 12, 1999

Dear Stakeholder:

SUBJECT: HIGH FLUX BEAM REACTOR ENVIRONMENTAL IMPACT STATEMENT

This is a follow-up to my letter of January 12, 1999 regarding the schedule of the environmental impact statement for the High Flux Beam Reactor at Brookhaven National Laboratory. Based on stakeholder input in recent months, several changes have been made to the High Flux Beam Reactor environmental impact statement process. We believe these changes are improvements that will benefit all stakeholders interested in the decision about the future of this research reactor:

- A U.S. Department of Energy Headquarters review of the draft document last month
 determined that additional work was needed to address stakeholder comments made
 during the public scoping process. The additional work should take about one month
 to complete. The draft environmental impact statement is expected to be available
 for public review and comment in mid-April.
- Several stakeholders, including Congressman Michael Forbes, requested that the Department extend the public comment period for the draft environmental impact statement. Federal law mandates a minimum comment period of 45 days, but in response to Congressman Forbes and other stakeholders, Energy Secretary Bill Richardson has extended the public comment period to 90 days. Therefore, the public availability of the draft environmental impact statement is expected to be from mid-April through mid-July 1999. Consistent with this new schedule, the final environmental impact statement is expected to be published in mid-November and the Record of Decision in mid-December 1999.
- Secretary Richardson has also directed the Department to:
 - 1. Provide the general public with access to information used in the development of the environmental impact statement That information will be made available to the general public.

- Establish a public reading room at BNL where the general public may review the draft environmental impact statement itself and the aforementioned EISrelated information.
- 3. Conduct a public information workshop in the environmental impact statement public comment period to present, describe and discuss the draft document The Department of Energy will conduct this public information workshop, which will be open to all. It will be held early in the public comment period of the draft environmental impact statement.

Of course, you will be notified by mail of the comment period's start and other pertinent dates. Also, the notice will be published in the Federal Register and various Long Island newspapers. The Department encourages interested parties to provide comments on the draft environmental impact statement by mail and/or e-mail. In preparing the final environmental impact statement, the Department will consider all comments received or postmarked by the end of the comment period. Later comments will be considered to the extent practicable.

Thank you for your continued interest in the High Flux Beam Reactor. If you have questions, issues or concerns you wish to discuss, please contact John Carter, our community/government relations manager (516-344-5195, icarter@bnl.gov) or me (516-344-3552, mholland@bnl.gov).

Sincerely,

Michael D. Holland, Director Project Management Division



NEWS

NEWS MEDIA CONTACT: Jeff Sherwood, 202/586-5806 FOR IMMEDIATE RELEASE December 21, 1998

Spallation Neutron Source Draft Environmental Impact Statement Issued for Public Comment

The Department of Energy has issued a draft Environmental Impact Statement (EIS) for the construction and operation of the proposed Spallation Neutron Source, an accelerator-based neutron scattering facility that would support research in broad areas of physical, chemical, materials, biological and medical sciences. When completed in 2005, the facility would provide the U.S. scientific community with a neutron source having greater intensity, power and instrumentation than existing neutron sources.

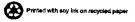
The Spallation Neutron Source is being designed by a collaboration of five Energy Department laboratories led by Oak Ridge National Laboratory. The other four partners are Argome National Laboratory, Brookhaven National Laboratory, Lawrence Berkeley National Laboratory and Los Alamos National Laboratory. The facility is expected to serve 1,000 - 2,000 scientists annually from universities, private industry and federal laboratories. The national facility would augment the research capabilities of current reactor-based neutron sources, help satisfy current and future demand for research neutrons and lead to scientific and technological discoveries.

The facility would consist of an ion source, a linear accelerator, a proton accumulator ring and a research facility containing a liquid mercury target that will produce the neutron beams and a suite of neutron scattering instrumentation. It would initially operate at a beam power of 1 megawatt, with the potential for being upgraded in the future to 4 megawatts with a second accumulator ring and target. Congress appropriated \$130 million for the project in fiscal year 1999 to continue research and development and to begin preliminary design and long-lead procurements.

The knowledge from neutron scattering research has wide applications. For example, chemical companies use neutron scattering research to make better fibers, plastics and catalysts; drug companies use neutrons to design drugs with higher potency and fewer side effects; and automobile manufacturers use the penetrating power of neutrons to understand better how to cast and forge gears and brake discs. Research on magnetism using neutrons has led to higher strength magnets for more efficient electric generators and motors and to better magnetic materials for magnetic recording tapes and computer hard drives.

R-98-197

(MORE)



U.S. Department of Energy

Office of Public Affairs

Washington, DC 2058

SPALLATION NEUTRON SOURCE

ENVIRONMENTAL IMPACT STATEMENT

RESULTS OF PUBLIC SCOPING

Department of Energy Oak Ridge Operations Office Oak Ridge, TN

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APPENDIX B SUMMARIES OF SCOPING COMMENTS

Summaries of all the comments received during the public scoping period for the SNS EIS are presented in this appendix. A total of 61 individuals; representing 15 citizen's groups. 14 government organizations, one Native American pueblo, one educational institution, the electorate (four elected officials), and themselves; submitted comments during the public scoping period. A total of 152 individual oral and written comments, including the endorsements and resolutions in support of locating the SNS at ORNL, was received. These comments were analyzed and classified according to the 20 subject categories listed below:

Air Quality Cumulative Impacts

Decontamination & Decommissioning Department of Energy Credibility

Environmental Justice General Environmental Health and Safety Land Use

Miscellaneous NEPA Process
Permitting Project Cost

Project Justification Resolutions and Endorsements

Siting Alternatives Socioeconomics
Technology Alternatives Transportation
Utilities Waste Management

Water Resources

The following information is included in Table B-1:

Code: A unique identifier that allows the comment summary to be traced to the original

comment. The code also identifies which location the comment was received from. i.e.: ORNL - Oak Ridge National Laboratory, ANL - Argonne National Laboratory, BNL - Brookhaven National Laboratory, LANL - Los Alamos

National Laboratory, GNRL - outside of the national laboratory areas.

Comment A concise summary of the verbal or written comment. Comment summaries were

Summary: derived directly from the written comment or from the transcripts of verbal

derived directly from the written comment of from the transcripts of vero-

comments.

EIS Ref. The section of the EIS in which the comment will be incorporated. Comments

will not be addressed individually in the EIS. The scope of the EIS will

incorporate all substantive comments.

Table B-1. Summaries of Scoping Comments.

No.	Code	Comment Summary	EIS Ref.
	Air Quality		
1	LANL-2	Include any beneficial impacts from the project that are going to make the air better.	4.1.2.3 4.2.2.3 4.3.2.3 4.4.2.3
2	ORNL-37	There should be no impact on air quality, except occasional minor radioactive releases that may add incrementally to those of other facilities in the area.	4.1.2.3 4.2.2.3 4.3.2.3 4.4.2.3
Cumulative Impacts			
l	ORNL-26	The EIS should include a discussion of the cumulative environmental and economic impacts, both positive and negative.	4.6
2	BNL-5	The EIS should include an evaluation of the potential impact the SNS may have on CERCLA actions underway at BNL.	4.6
		Project Cost	
1	ORNL-1	Is the \$1 billion cost of the SNS a conservative estimate?	3.2
2	LANL-6 LANL-9	The \$1.3 billion to be spent on the SNS could be used to complete the clean up of DOE sites by 2006. The current resources to complete clean up by this date are insufficient.	2.2
3	LANL-9	Will money be a significant factor in eliminating certain SNS candidate sites from consideration and in selecting a final site?	See Note
	Decontamination & Decommissioning		
ĺ	ORNL-27	The EIS should include a discussion of the design life and decontamination and decommissioning plans for the facility.	3.2

¹This comment relates to other factors concerning the SNS decision. The EIS is a means to integrate environmental values and amenities into early planning and decision making. The EIS is not a decision document. The DOE will publish a Record of Decision (ROD) after the final EIS that specifies and justifies the decisions on whether or not to build the SNS and where to build it.



U.S. DEPARTMENT OF ENERGY

MEMORANDUM

DATE January 15, 1998

Michael D. Holland, Project Manager REPLY TO

HFBR Transition Project

SUBJECT MINUTES OF THE HIGH FLUX BEAM REACTOR EIS SCOPING MEETING

TO K. Dean Helms, Executive Manager Brookhaven Group

Enclosed are the Minutes of the second High Flux Beam Reactor EIS Scoping Meeting held on January 10, 1998 at the Longwood High School in Middle Island, New York.

If you have any questions, please contact Dr. Nand Narain, the EIS Document Manager, at extension 5435.

Enclosure:

As stated

R. Hunter, NE-2, FORS, w/encl. cc: P. Dehmer, ER-10, GTN, w/encl. I. Thomas, ER-13, GTN, w/encl. M. Johnson, ER-80, GTN, w/encl. R. Lange, NE-40, GTN, w/encl. L. Jessee, EH-422, FORS, w/encl.

M. Hutmaker, NE-40, GTN, w/encl. T. O'Connor, NE-40, GTN, w/encl.

C. Hickey, ER-8, GTN, w/encl. S. Staten, ER-53, GTN, w/encl.

J. Kennedy, OM, CH, w/encl.

F. Crescenzo, BHG, w/encl.

I. Atney, BHG, w/encl.

G. Granzen, BHG, w/encl.

Transition Proj Team, BHG, w/encl.

W. Gunther, BNL, w/encl. A. Queirolo, BNL, w/encl. J. Barkwill, BNL, w/encl.

W. Brynda, BNL, w/encl.

J. Carelli, BNL, w/encl.

D. Ports, BNL, w/encl.

M. Lynch, BNL, w/encl.

R. Butler, BNL, w/encl.

Appendix H

Examples of Public Comment Request and Comment and Response Documentation

High Flux Beam Reactor EIS Scoping Meeting No.2 Summary

On January 10, 1998, the second in a series of three EIS Scoping Meetings was held at the Longwood High School Auditorium in Middle Island, New York, from 1:00 p.m. to 4:00 p.m.

The Scoping Meeting was well attended by approximately 100 - 125 people, including representatives from DOE Headquarters, the Brookhaven Group, Brookhaven National Laboratory, the general public, the media, and representatives from local civic organizations. A total of 65 people signed in at the Registration Desk and 26 speakers signed up to give comments. Only 24 speakers actually provided comments.

Mr. K. Dean Helms, the Executive Manager for the Brookhaven Group, welcomed the audience and spoke briefly about the EIS process. Mr. Helms reiterated that at the present time, the DOE has NO preferred alternative. He referred the audience to copy's of Secretary Peña's letter to the Brookhaven community of December 10, 1997 (available in the lobby) in which the Secretary states that there is no preferred alternative at the present time. Following these introductory remarks, Mr. Helms introduced the other two panel members: Professor William Ginsberg, from Hofstra University School of Law, who served as Moderator, and Mr. Michael Holland, from the Department of Energy's Brookhaven Group, the EIS Project Manager. Mr. Helms next turned the meeting over to Professor Ginsberg, the Scoping Meeting Moderator.

Professor Ginsberg spoke about his background and qualifications for serving as moderator and then went over the ground rules for conducting the Scoping Meeting and what we hoped to accomplish. He then introduced Mr. Holland of the Department of Energy's Brookhaven Group.

Mr. Holland spoke about the EIS process and the schedule through to the Record of Decision. He also spoke of the publics' opportunity to stay involved in the process and their ability to comment along the way. Mr. Holland next went into a short technical discussion about the HFBR and the science that it provides. Following Mr. Holland's presentation, Professor Ginsberg opened the meeting to the floor for a short question and answer period to clarify any procedural questions about how to register comments.

Following a short break, Professor Ginsberg convened the formal comment portion of the Scoping Meeting to those who wished to speak. The audience was provided an opportunity to comment for a time period of approximately 2 1/2 hours with several short breaks spaced throughout the meeting.

Many of the people present were also at the first scoping meeting. The majority of people spoke for shutdown of the reactor without providing specific comments on issues or alternatives to be included in the EIS.

A number of commentors asked for detailed epidemiological and risk assessment studies by independent experts to resolve the issue of the health hazards associated with the HFBR. Approximately five people spoke on behalf of re-starting the HFBR. Four were current Laboratory employees but one individual favoring re-start stated that he was not associated with the Laboratory.

The registration desk was closed at approximately 3:20 p.m. because enough speakers had signed up to take the meeting to 4:00 p.m.. The Scoping Meeting was adjourned at 4:07 p.m.

PUBLIC SCOPING REPORT

For the for the High Flux Beam Reactor Transition Project at the Brookhaven National Laboratory

United States Department of Energy Brookhaven Group



September 1998

Public Scoping Report, September 1998 High Flux Beam Reactor Transition Project Environmental Impact Statement

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Appendix A: Draft EIS Outline

Appendix H

Examples of Public Comment Request and Comment and Response Documentation

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The draft EIS analyzes the potential environmental impacts from the proposed action (to build and operate the Spallation Neutron Source at 1 megawatt, and then at 4 megawatts) and the no-action alternative of not building the facility. The draft EIS evaluates four alternative sites: Oak Ridge National Laboratory in Tennessee (the preferred alternative), Argonne National Laboratory in Illinois, Brookhaven National Laboratory in New York and Los Alamos National Laboratory in New Mexico.

The draft EIS will be accessible via the department's National Environmental Policy Act Web Site at http://tis.eh.doe.gov/nepa/. General information on the project can be found at http://www.ornl.gov/sns/. Copies of the draft EIS can also be obtained from Mr. David Wilfert, SNS EIS Manager, U.S. Department of Energy, Oak Ridge Operations Office, 200 Administration Road, 146/SNS, Oak Ridge, TN 37831.

The department encourages all interested parties to provide comments on the draft EIS. Comments on the draft EIS may be submitted to Mr. Wilfert by mail at the above address, electronic mail (NSNSEIS@ornl.gov), telephone (800-927-9964), facsimile (423-576-4542) or at public meetings to be held at the four alternative sites. The department will consider all comments received or postmarked by February 8, 1999, in preparing the final EIS. Comments received after February 8 will be considered to the extent practicable.

Two public meetings, at 2 p.m. and 7 p.m., will be held at each location:

Date	Location
January 19, 1999	Department of Energy Los Alamos Area Office Main Conference Room (Rm. 100) 528 35th Street Los Alamos, NM
January 21, 1999	Brookhaven National Laboratory Berkner Hall (Bldg. 488) Brookhaven Avenue Upton, NY
January 25, 1999	Argonne National Laboratory Building 401 - Advanced Photon Source, Rm. A1100 9700 South Cass Avenue Argonne, IL
January 28, 1999	American Museum of Science and Energy 300 South Tulane Avenue Oak Ridge, TN

(NOTE: The Oak Ridge date is a change from a previously publicized date.)

R-98-197

-DOE-